Investigation of a Suspected Epidemic

CDC
Centers for Disease Control and Prevention

When Informed of Suspected Bacterial Meningitis Cases

- **Review reports of cases**
  - do they meet the case definition?
  - are they clinically consistent with meningitis?
  - what is the attack rate?
- **Alert nearby health facilities**
  - have health workers seen cases?
  - remind health workers of clinical presentation and case definitions
- **Send an investigation team to the field**

CDC
Centers for Disease Control and Prevention

Members of the Investigation Team

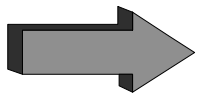
- Epidemiologist and / or clinician
- Microbiologist

  or
- Technician with experience in processing specimens from patients with meningococcal disease
- Driver, community representatives, interpreters, general helpers

CDC
Centers for Disease Control and Prevention

Investigation Team Duties

- Verify reported cases
- Investigate new cases to establish diagnosis
- Obtain laboratory specimens
- Get and analyze information about cases
- Make recommendations & report findings



CDC
Centers for Disease Control and Prevention

Investigation Team Duties (cont.)

- **Assess the local ability to respond:**

  - are cases being managed properly?

  - are there enough supplies?

  - is there enough staff?

  - can they conduct or cooperate with the vaccination campaign?

CDC
Centers for Disease Control and Prevention

Analyze Data from Investigation

- **Person**
- **Place**
- **Time**

CDC
Centers for Disease Control and Prevention

Analyze Data from Investigation
- Person-

- How many cases and deaths?
- What is the case fatality rate?
- What are the ages of cases?
- What are the attack rates and the age-specific attack rates?

CDC
Centers for Disease Control and Prevention

Analyze Data from Investigation - Place-

- **Where are cases occurring?**
- **Is the outbreak spreading?**
  - Are there accessible health facilities in the affected areas?
- **Show location of cases on maps**
- **<u>Indicate attack rates in different areas</u>**
  - helps follow progress of disease
  - helps plan vaccination campaign

CDC
Centers for Disease Control and Prevention

Analyze Data from Investigation

-Time -

- When did cases and deaths occur?
- Is the number of cases increasing or decreasing?
- Make graphs showing the number of cases over time.

CDC
Centers for Disease Control and Prevention